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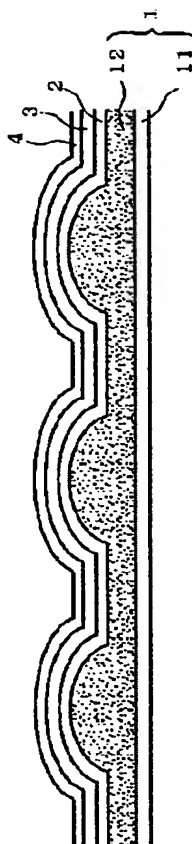
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TITLE : DECORATIVE SHEET WITH
PHOTOCATALYTIC FUNCTION



ABSTRACT : PROBLEM TO BE SOLVED: To provide a decorative sheet, with a photocatalytic function, which is long-lived regardless of the nature of a base material and highly design-rich.

SOLUTION: This decorative sheet is composed of an amorphous titanium oxide layer 3 and an amorphous titanium oxide layer 4 containing an anatase titanium oxide, laminated on a base material 1 formed of a backing paper 11 with an expanded synthetic resin layer 12. The amorphous titanium oxide layer 3 is laminated by applying an aqueous solution containing an amorphous titanium oxide, and the amorphous titanium oxide layer 4 containing the anatase titanium oxide is laminated by applying an aqueous solution obtained by adding anatase titanium oxide powder to an aqueous solution containing the amorphous titanium oxide and the anatase titanium oxide.

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M3 - [01] A422 A940 C108 C550 C730 C801 C802 C803 C804 C805 C807 M411 M720
M781 M904 M905 M910 N104 N513 N514 Q130 Q261 Q421 Q620 Q623 R023 R036
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AB - JP2003019764 NOVELTY - A decoration sheet with photocatalytic function, has an amorphous type titanium oxide layer (3) having thickness of 1-10 μ m and anatase-type titanium oxide containing amorphous type titanium oxide layer (4) having thickness of 1-10 μ m, laminated on a base material (1). The layer (4) contains 10-95 wt.% of anatase-type titanium oxide.

- USE - As decoration sheet.

- ADVANTAGE - The decoration sheet has photocatalytic function, and high durability. The amorphous type titanium oxide effectively prevents the change and the decomposition of the base material or print layer during the decoration sheet manufacture process. The anatase-type titanium oxide has excellent acid resistance and ultraviolet-resistant property, hence effectively prevents the change and the decomposition of base material or print layer. The photocatalytic function is maintained in the sheet and peeling of the anatase-type microparticle is reduced. The sheet of high design effect is produced by chemical embossing or mechanical embossing on the base material. Since, the aqueous solvent is used, the manufacture process of the decoration sheet is performed without affecting environment. The manufacture process does not requires special apparatus and the conventional manufacture process can be used by setting controlling conditions.

- DESCRIPTION OF DRAWING(S) - The figure shows the cross sectional model of the decoration sheet having photocatalytic function.

- base material 1

- print layer 2

- amorphous type titanium oxide layer 3

- anatase-type titanium oxide containing amorphous type titanium oxide layer 4

- synthetic resin layer 12

- (Dwg.1/2)

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